

IN THE CLAIMS:

1. (currently amended) An apparatus for handling filter disks, the apparatus comprising:

a center post member having first and second end portions;
at least one filter disk;

5 an attachment means, operatively connected to the first end portion of the center post member, the attachment means including means for facilitating the lifting of at least one filter disk movement of the handling apparatus including at least one filter disk from a first position to a second position, wherein the attachment means has an outside dimension which is smaller than a central aperture formed in the at least one filter disk, thereby allowing the at least one filter disk to be slid over the attachment means such that apparatus is separated from the at least one filter disk by sliding the apparatus out from the at least one filter disk; and

10 an adapter member having an upper and an outer surface, operatively connected to the second end portion of the center post member, for supporting the at least one filter disk when the at least one filter disk is operatively positioned relative to the apparatus operatively cooperating with a liquid outlet having an inner surface, the adapter member further comprising:

15 at least one aperture, operatively positioned in the upper surface, for allowing filtered liquid to be moved through the at least one aperture, to the liquid outlet and from the liquid outlet to a filtered liquid collection; and

20 sealing structure, operatively positioned on the outer surface of the adapter member, for removably, sealingly interfacing with the inner surface of the liquid outlet.

2. (currently amended) The apparatus of claim 1, further comprising:

a lifting device operatively connected to the attachment member for vertically raising the handling apparatus such that the adapter member is disengaged from the liquid outlet thereby allowing the at least one filter disk to be transported from the first position to the second position.

3. (original) The apparatus of claim 2, wherein the lifting device comprises:

a motor powered hoist.

4. (original) The apparatus of claim 2, wherein the lifting device comprises:

a manually operated chain hoist.

5. (currently amended) The apparatus of claim 1, wherein the first position is an installed position within a filter assembly, the filter assembly including the liquid outlet, in which fluid passes through the at least one filter disk operatively positioned relative to the center post member and the second position is a remote location exterior to the filter assembly where the at least one filter disk can be removed from the center post member and replaced with at least one new filter disk thereon.

6. (previously presented) The apparatus of claim 1, wherein the attachment member comprises:

an eyebolt assembly having threads associated therewith for engaging with corresponding threads formed on the first end portion of the center post member.

7. (previously presented) The apparatus of claim 1, wherein the attachment member comprises:

5 a swivel hoist ring assembly having threads associated therewith, the threads for engaging with corresponding threads formed on the first end portion of the center post member.

8. (original) The apparatus of claim 1, wherein the attachment member comprises:

a lifting eye welded to the first end portion of the center post member.

9. (canceled)

10. (currently amended) The apparatus of claim 1, wherein the adapter member is configured to sufficiently support at least fourteen (14) filter disks.

11. (currently amended) The apparatus of claim 10, wherein the adapter member is configured to sufficiently support at least fifty-six (56) filter disks.

12. (original) The apparatus of claim 1, wherein the adapter member has female threads formed therein for operatively engaging with corresponding male threads formed on the second end portion of the center post member.

13. (canceled)

14. (currently amended) The apparatus of claim 13, wherein the at least one aperture is semi-circular.

15. (currently amended) The apparatus of claim 1, wherein the at least one filter disk is operatively positioned relative to the center post member by sliding the at least one disk over the first end portion of the center post member toward the adapter member.

16. (Withdrawn) A filter housing assembly comprising:

a housing having an interior chamber for processing fluid, a central axis and a bottom portion;

5 a base member having opposed upper and lower surfaces and at least an inlet portion and an outlet portion, the upper surface being operative to sealingly engage the bottom portion of the housing; and

at least one insert assembly sealingly engaged within the at least one outlet portion of the base member, the insert assembly comprising:

10 an upper surface which mates with the upper surface of the base member; and
a central aperture for sealing engagement with a handling apparatus that has at least one filter disk engaged thereon, the central aperture providing a crevice-free flow path through the insert assembly when the handling apparatus is disengaged therefrom such that, after the removal of the filter disk handling apparatus from sealing engagement with the bottom portion of the housing, a substantially direct flow path for the fluid results thereby 15 facilitating the cleaning of the interior chamber of the housing.

17. (Withdrawn) The filter assembly of claim 16, wherein the upper surface of the base member has a raised portion along located peripherally and lower portion positioned adjacent to the insert assembly.

18. (Withdrawn) The filter assembly of claim 17, wherein the upper surface has a transition portion between the raised and lower portion, the transition portion at an angle with respect to the lower portion.

19. (Withdrawn) The filter assembly of claim 16, wherein the upper surface of the base member includes a raised portion located along the periphery of the upper surface and a central region, the raised portion engaging with the bottom portion of the housing and connected to the central region by a concave surface.

20. (Withdrawn) The filter assembly of claim 16, wherein the handling apparatus comprises;

5 a center post member having a first end portion and a second end portion;
an attachment member operatively engaged with the first end portion of the center post member, the attachment member including means for connecting to the handling apparatus and disengaging from the at least one insert assembly; and

10 an adapter member, operatively connected to the second end portion of the center post member and supporting the at least one filter disk which is operatively positioned relative to the center post member, the adapter member sealingly engaging the central aperture of the insert assembly when the handling apparatus is in an installed position.

21. (Withdrawn) The filter assembly of claim 20, wherein the adapter member further comprises:

5 at least one circumferential groove formed in an outer portion of the adapter member for receiving an o-ring and facilitating the sealing engagement of the adapter member with the central aperture of the insert assembly.

22. (Withdrawn) The filter assembly of claim 21, wherein the adapter member further comprises:

at least one aperture formed therein for providing a flow passage through the adapter member when the center post member is in the installed position.

23. (Withdrawn) The filter assembly of claim 22, wherein the at least one aperture is semi-circular.

24. (currently amended) A method for handling filter disks from an initial position to a second position such that the used filter disks are removed, the method comprising the acts of:

5 providing at least one filter disk operatively positioned on a handling apparatus, the handling apparatus comprising:

10 a center post member having a first end portion and a second end portion;

15 an attachment member, operatively engaged with the first end portion of the center post member and including means for facilitating the lifting of at least one filter disk from an initial position to a second position, wherein the attachment member has an outside dimension which is smaller than a central aperture formed in the at least one filter disk, thereby allowing the at least one filter disk to be slid over the attachment members such that handling apparatus is separated from the at least one filter disk by sliding the handling apparatus out from the center of the at least one filter disk; and

20 an adapter member having an upper surface and an outer surface, operatively connected to the second end portion of the center post member for ~~supporting the at least one filter disk when the at least one filter disk is operatively positioned relative to the center post member operatively~~;

attaching a vertical lifting device to the handling apparatus; and

vertically lifting the handling apparatus and the at least one filter disk;

relocating the at least one filter disk from the initial position to the second position; and

25 at the second position, sliding the handling apparatus out from the center of the at least one filter disk such that the handling apparatus is removed from the at least one filter disk.

25. (currently amended) An apparatussystem for handling filter disks, the apparatussystem comprising:

a center post member having first and second end portions;

~~at least one filter disk;~~

5 an attachment member operatively connected to the first end portion of the center post member, ~~the attachment member providing means for facilitating the movement~~ lifting of the handling apparatus including at least one filter disk from an installed position to a remote location; the installed position being when the handling apparatus is operatively positioned within a filter assembly and the remote location being a location exterior to the 10 filter assembly, ~~wherein the attachment member has an outside dimension which is smaller than a central aperture formed in the at least one filter disk, thereby allowing the at least one filter disk to be slid over the attachment members such that apparatus is separated from the at least one filter disk by sliding the apparatus out from the center of the at least one filter disk;~~

15 an adapter member having an upper and an outer surface, operatively connected to the second end portion of the center post member, for ~~supporting at least one filter disk when the at least one filter disk is operatively positioned relative to the adapter member~~ operatively cooperating with a liquid outlet having an inner surface, the adapter member further comprising:

20 at least one aperture, operatively positioned in the upper surface, for allowing filtered liquid to be moved through the at least one aperture, to the liquid outlet and from the liquid outlet to a filtered liquid collection; and

sealing structure, operatively positioned on the outer surface of the adapter member, for removably, sealingly interfacing with the inner surface of the liquid outlet; and

25 a lifting device, operatively connected ~~able~~ to the attachment member, for facilitating the ~~removing~~ al of the center post member/adapter member ~~handling~~ apparatus combination from the liquid outlet of the filter assembly such that the at least one filter disk operatively positioned thereon can be transported from the installed position to the remote location.

26. (original) The apparatus of claim 25, wherein the lifting device comprises:

a motor powered hoist.

27. (original) The apparatus of claim 25, wherein the lifting device comprises:

a manually operated chain hoist.

28. (currently amended) The apparatusmethod of claim 254, wherein the remote location comprises further comprising the acts of:

a location where removing the at least one liquid filter disk from the center post member can be removed; and

5 replaced operatively positioning with at least one new liquid filter disk on the center post member.

29. (previously presented) The apparatus of claim 25, wherein the attachment member comprises:

an eyebolt assembly having threads associated therewith for engaging with corresponding threads formed on the first end portion of the elongated post member.

30. (previously presented) The apparatus of claim 25, wherein the attachment member comprises:

5 a swivel hoist ring assembly having threads associated therewith, the threads engaging with corresponding threads formed on the first end portion of the elongated post member.

31. (original) The apparatus of claim 25, wherein the attachment member comprises a lifting eye welded to the first end portion of the elongated post member.

32. (canceled)

33. (currently amended) The apparatus of claim 25, wherein the adapter member is configured to sufficiently support at least fourteen (14) filter disks.

34. (currently amended) The apparatus of claim 33, wherein the adapter member is configured to sufficiently support at least fifty-six (56) filter disks.

35. (original) The apparatus of claim 25, wherein the adapter member has female threads formed therein for operatively engaging with corresponding male threads formed on the second end portion of the elongated post member.

36. (canceled)

37. (currently amended) The apparatus of claim 3625, wherein the at least one aperture is semi-circular.

38. (Withdrawn) A filter assembly comprising:

a housing having an interior chamber, a central axis and a bottom portion;

5 a base member having opposed upper and lower surfaces and at least an inlet portion and an outlet portion, the upper surface being operative to sealingly engage the bottom portion of the housing;

at least one insert assembly sealingly engaged within the at least one outlet portion of the base member, the insert assembly comprising:

an upper surface which mates with the upper surface of the base member;

10 a central aperture for sealing engagement with a handling apparatus having at least one filter disk operatively positioned thereon, the central aperture providing a crevice-free flow path through the insert assembly when the handling apparatus is disengaged therefrom thereby facilitating the cleaning of the interior chamber; and

15 at least one filter disk having a central aperture operatively formed therein wherein the handling apparatus comprises;

1 | a center post member having first and second end portions;

20 an attachment member operatively connected to the first end portion of the center post member, for operatively connecting and disengaging the handling apparatus from the at least one insert assembly wherein the attachment member has an outside dimension which is smaller than a central aperture formed in the at least one filter disk, thereby allowing the at least one filter disk to be slid over the attachment members such that handling apparatus is separated from the at least one filter disk by sliding the handling apparatus out from the central aperture of the at least one filter disk; and

25 an adapter member, operatively connected to the second end portion of the center post member, for supporting the at least one filter disk when the at least one filter disk is operatively positioned on the handling apparatus and for sealingly engaging with the central aperture, when the handling apparatus is in the installed position in the housing.

39. (Withdrawn) The filter assembly of claim 38, wherein the upper surface of the base member is downwardly sloped toward the insert assembly.

40. (Withdrawn) The filter assembly of claim 38, wherein the upper surface of the base member includes a raised portion located along the periphery of the upper surface and a central region, the raised portion engaging with the bottom portion of the housing and connected to the central region by a concave surface.

41. (Withdrawn) The filter assembly of claim 38, wherein the adapter member further comprises:

5 at least one circumferential groove formed in an outer portion of the adapter member for receiving an o-ring and facilitating the sealing engagement of the adapter member with the central aperture of the insert assembly.

42. (Withdrawn) The filter assembly of claim 41, wherein the adapter member further comprises:

at least one aperture formed therein for providing a flow passage through the adapter member when the center post member is in the installed position.

43. (Withdrawn) The filter assembly of claim 42, wherein the at least one aperture is semi-circular.

44. (New) The apparatus of claim 1, wherein the attachment member has an outside dimension which is smaller than a center aperture formed in at least one liquid filter disk, thereby allowing the at least one liquid filter disk to be slid over the attachment member such that the center post member is separated from the at least one liquid filter disk
5 by sliding the center post member out from the center aperture.

45. (New) The system of claim 25, wherein the attachment member has an outside dimension which is smaller than a central aperture formed in at least one liquid filter disk, thereby allowing the at least one liquid filter disk to be slid over the attachment member such that the center post member is separated from the at least one liquid filter disk by sliding
5 the center post member out from the center aperture.